

Chapter Seven

7. Other Installation Restoration (IR) Program Considerations

This chapter identifies specific issues and activities that are associated or may occur concurrently with IR Program activities. Many of the areas addressed here will have major impacts on the IR Program budget, prioritization, and schedule.

7.1 RESOURCE CONSERVATION AND RECOVERY ACT (RCRA) CORRECTIVE ACTION (CA)

Prior to the Hazardous and Solid Waste Amendment (HSWA) of RCRA in 1984, the term "corrective action" (CA) referred only to remedial action for groundwater contamination. HSWA greatly expanded the government's authority to require CA for releases of hazardous waste and hazardous constituents at facilities that manage hazardous waste. Expanded EPA and State statutory authority includes: (1) the ability to require corrective action for all releases of hazardous wastes or constituents from any Solid Waste Management Unit (SWMU) at a treatment, storage, or disposal facility seeking or renewing a hazardous waste permit and (2) the authority to require CA beyond a facility's boundaries where necessary to protect public health and the environment. RCRA, Sections 3004(u); 42 U.S.C. § 6924 (u) (2001) and 3004(v), 42 U.S.C. § 6924(v)(2001).

Examples of CA(s) include: (1) containment, stabilization or removal of the source of contamination; (2) Studies to assess the nature and health risks of contamination; (3) Identification and

evaluation of the remedies; and (4) implementation and monitoring of the chosen remedy to determine the effectiveness thereof.

A brief outline of the RCRA Corrective Action Process can be found in EPA's OSWER Directive 9902.3- 2A, *RCRA Corrective Action Plan (Final)*, (May 1994).

7.2 UNDERGROUND STORAGE TANK (UST) SITES

The UST programs of the DON involve both cleanup and compliance issues; however, only cleanup of past contamination from USTs is managed under the IR Program and eligible for ER, N funding.

DON UST compliance policies, found in OPNAVINST 5090.1B (<http://www.denix.osd.mil/denix/DOD/Policy/OPNAV/5090.1B/CH16.doc>) and MCO P5090.2A (<http://denix.osd.mil/denix/Public/Policy/Marine/5090.2/mco5090.pdf>), respectively, comply with all applicable Federal, State, and local regulations pertaining to USTs.

The NAVFAC's *Underground Storage Tank Program Working Guidance Document* details the Navy's UST program. The guidance describes the Navy's UST program, defines the responsibilities of various organizations within the Navy, and provides general technical information regarding UST management. Some of the highlights of this guidance are presented here.

7.2.1 UST Cleanup Policy and Funding Guidance

USTs generally are all tanks and attached piping containing regulated substances in which the tank volume (including piping) is 10 percent or more beneath the surface of the ground. EPA issued Spill Prevention, Control and Countermeasure Plan regulations on 26 May 1977. OPNAVINST 5090.1B and MCO P5090.2 identify specific exclusions.

The DON accomplishes compliance and cleanup actions for USTs through one or a combination of the following funding categories:

Claimant/installation managed funds;

Military Construction (Tank replacement);

Marine Corps managed funds, including Headquarters or installation managed funds; and

Environmental Restoration, Navy (ER, N).

Under "special circumstances," ER, N funding can be used at otherwise ineligible UST sites. For example, a leaking UST located within the area of contamination of a CERCLA site or operable unit would most likely be cleaned up as part of the CERCLA response action since it may be impossible to conduct two separate response actions. Special circumstances such as these must be evaluated on a site-by-site basis.

Removal or closure-in-place of leaking and abandoned tanks is not eligible for

ER, N funding unless the removal/closure is a necessary part of a cleanup action. Cleanup of a "recent" overflow spill from a tank is not eligible for ER, N funding. Spills covered or required to be covered by Spill Prevention, Control and Countermeasure plans are not eligible for ER, N funding.

The following actions are classified as compliance and, therefore, are not eligible for ER, N funding:

Removal or permanent closure of non-leaking USTs;

Annual or periodic regulatory testing requirements, such as groundwater sampling, tank tightness testing, and inventory control;

Maintenance of leak detection, corrosion protection, and spill/overflow prevention systems;

Tank replacement or upgrade; and

New tank construction/installation, maintenance, record keeping, inspections, and management plans.

Compliance actions must be funded by installations or major claimants and should be carefully planned and budgeted. The DON UST programs are complex and encompass new tank design, tank operation and maintenance, tank upgrade, leak detection, corrosion protection, spill/overflow protection, and repair.

Figure 7-1 can be used to determine the ER, N eligibility for response to underground petroleum leaks.

Additionally, Sections 8.5.1 and 8.5.2 of this IR manual detail actions eligible and

ineligible for ER, N funding, respectively.

7.2.2 Reporting

Cleanup of an UST site under the IR Program must be added to the Restoration Management Information System (RMIS) IR database by the RPM.

7.3 REAL PROPERTY TRANSACTIONS AND MANAGEMENT

EFD/EFA real estate and planning personnel in conjunction with installation personnel are responsible for ensuring that the IR Program is fully considered prior to engaging in real property transactions and as part of all land management decisions.

7.3.1 Sale or Transfer of Real Property

40 C.F.R. § 373.1, in accordance with CERCLA § 120(h)(1), 42 U.S.C. § 9620(h)(1) (2001), requires all Federal agencies, when contracting for the sale or transfer of real property, to notify prospective purchasers if hazardous substances have been stored for a year or longer on the property or have ever been released or disposed of on the property. This notice identifies the type and quantity of such hazardous substances and the time when the storage, release, or disposal took place.

Before conveying any real property on which any hazardous substances have been stored for a year or more, known to have been released, or disposed of, a

Federal agency must comply with the provisions of CERCLA § 120(h)(3), 42 U.S.C. § 9620 (h)(3) (2001). This section requires that the deed for each property where hazardous waste was stored, released, or disposed of, must contain specific information regarding the hazardous substances and a covenant that warrants the following:

All remedial action necessary to protect human health and the environment with respect to any such substance remaining on the property has been taken before the date of transfer; and

The United States will conduct any additional remedial action found to be necessary after the date of such transfer.

The DON will be responsible for all expenses to the Government resulting from the supervision and decontamination of the Navy's excess and surplus real property that has been subjected to hazardous material contamination. The DON is required to notify GSA or the disposal agency designee, of "any and all inherent hazards involved relative to such property in order to protect the general public from hazards and to preclude the Government from any and all liability resulting from indiscriminate disposal or mishandling of contaminated property." 41 O.C.F.R § 101-47.401-4 (2000).

The DON should be alert to potential hazardous substance contamination when it purchases or otherwise obtains real property. Property transfer evaluations should be completed prior to entering into any real property transaction.

ER, N ELIGIBILITY REQUIREMENTS FOR CONTAMINATION FROM UST SITES

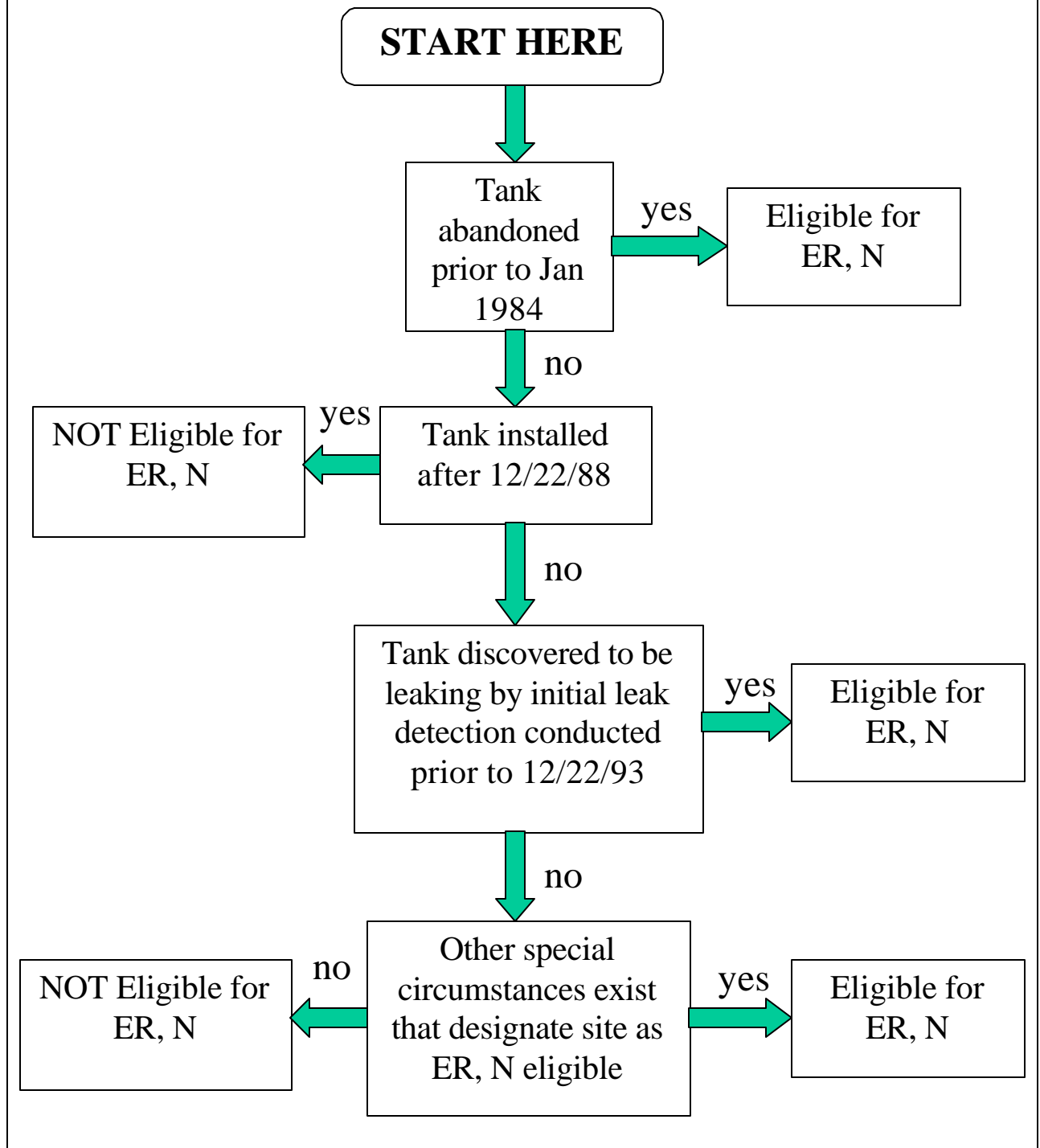


Figure 7-1: Environmental Restoration, Navy UST Eligibility

The extent of the contamination should be reflected in the appraisal before acquiring a known contaminated site. *NAVFAC Contracting Manual (P 68)* and *NAVFAC Real Estate Procedural Manual (P 73)*, provide further guidance to DON personnel involved in the sale or transfer of real property.

For parcels that are part of a site on the National Priorities List (NPL), EPA must concur if the parcel is characterized as clean. For parcels characterized as clean that are not part of a site on the NPL, the concurrence of the appropriate State official must be sought. CERCLA § 120 requirements apply regardless of whether the real property being conveyed is part of an NPL site. Additionally, a Federal agency would continue to have obligations under CERCLA § 120(e), 42 U.S.C. § 9620(e) (2001) and any existing applicable FFA for conveyed real property that is part of an NPL site.

Federal agencies that have been identified to receive BRAC property from the Navy may decide not to accept the property until environmental restoration has been completed (partially or in full). Cleanup and management responsibilities must be established between the Navy and the receiving Federal activity and set forth in the transfer document.

DON Environmental Policy Memorandum 95-01 of 26 May 1995 entitled *Environmental Requirements for Federal Agency-to-Agency Property Transfer at BRAC Installations* established the requirement for a summary document. This document must be forwarded to the Assistant Secretary of the Navy (Installations and

Environment) [ASN (I&E)] as part of the package requesting approval for an agency-to-agency property transfer.

7.3.2 Disposal of Real Property Contaminated with Ammunition, Explosives, or Chemical Agents

It is the policy of DON to use every means possible to protect the public from exposure to hazards from real property contaminated with ammunition, explosives, or chemical agents. In addition, the permanent contamination of real property by the final disposal of ammunition, explosives, or chemical agents is prohibited. Real property that is known to be contaminated with ammunition, explosives, or chemical agents must be decontaminated with the most appropriate technology to ensure the protection of the public consistent with the proposed end use of the property.

All plans for leasing, transferring, excessing, disposing and/or remediating Navy real property when ammunition, explosives, or chemical agent contamination exists or is suspected to exist shall be submitted to the Department of Defense Explosive Safety Board (DDESB) via NAVORDCEN (Code N71) for the review and approval of explosive safety aspects. DoD 6055.9-STD, *Ammunition and Explosives Safety Standards* (August, 1997).

These land disposal submissions shall state the intended use of the property, the nature and extent of on- and off-post contamination, location of the contaminated land, any improvements that may have been made, proposed detection and degree of

decontamination, and the extent to which the property may be used safely without further decontamination.

When the accountability and control of the contaminated real property is transferred, the required permanent record of contamination shall also be transferred.

Further detail on the requirements for the disposal of real property known or suspected to be contaminated with ammunition, explosives or chemical agents is outlined in Chapter 12 of the *DoD Ammunition and Explosives Safety Standards*, DoD 6055.9-STD (August, 1997).

7.3.3 Environmental Baseline Survey (EBS)

In accordance with DON environmental policy, "an EBS shall be prepared for all leases, easements, and transfers of real property. The scope of the EBS (investigation and documentation) must be appropriate to the type of real estate actions and property involved." DON Environmental Policy Memo 95-01 *Environmental Requirements for Federal Agency-to-Agency Property Transfer at BRAC Installations* (May 26, 1995). The EBS for a particular facility draws heavily on information about the IR Program at that installation.

EFD/EFAs are responsible for preparing the EBS for all leases, easements and transfers for BRAC and Non-BRAC properties. The EFD/EFA determines the appropriate amount of investigation and documentation based upon the particular circumstances of the real estate instrument and the proposed use of the property. In making this

determination the EFD/EFA needs to consider a number of factors including changes in current use, type of use, length of use, potential risk, etc. It would seem that the investigation and documentation could range from a note in the file saying no further documentation is necessary (through a review of existing environmental studies) to a full-blown EBS. Procedures for conducting an EBS and the review process are described in the DON Environmental Policy Memo 95-01, *Environmental Requirements for Federal Agency-to-Agency Property Transfer at BRAC Installations* (May, 1995).

www.epa.gov/swerffrr/doc/052695.htm

EFD/EFAs have the responsibility to prepare an EBS for all leases, easements and transfers for BRAC and Non-BRAC properties.

7.3.4 Finding of Environmental Suitability for Real Property Transaction

Based on the review of the EBS, the EFD/EFA will prepare an Environmental Finding of Suitability to Transfer (FOST), an Environmental Finding of Suitability for Early Transfer (FOSET), or an Environmental Finding of Suitability for Real Property Transaction (FOSRPT).

The FOST describes the basis for the deed restrictions to be included in any recorded deed(s); the rationale for the property being suitable for the intended use; and the future use restrictions for the property related to releases 'noticed' in the transfer documents and which are consistent with all the remedial decisions. The FOSRPT is similar to the

FOST except it can be used for leases, easements, permits, and Host Tenant Real Estate Agreements. The EFD/EFA will use ASN, NAVFAC and other existing guidance to prepare and process these findings for BRAC and Non-BRAC properties.

7.4 BASE REALIGNMENT AND CLOSURE (BRAC) POLICY

The Base Closure and Realignment Act of 1988 and the Defense Base Closure and Realignment Act, 10 U.S.C. § 2687 (note) (2001), govern the closure and realignment of DoD installations identified and approved for closing or realignment in 1988, 1991, 1993 and 1995. The objective of the DON Base Realignment and Closure (BRAC) Environmental Restoration Program is to complete necessary environmental restoration at those DON installations being closed under BRAC. Most methods and protocols in use by the DON for the IR Program are applicable to the BRAC installations. The differences in the two programs include:

Scheduling - BRAC requires a more aggressive schedule of cleanup than the IR Program. Expedited response actions are emphasized;

Funding - Congress established the Base Closure Account which provided multi-year funds to pay for BRAC independently of the ER, N. This fund can only be used to investigate and remediate existing conditions at closing or realigning installations that have property identified for excessing. Costs to ensure environmental compliance of current operations are not supported by this account; and

Site Closure - Site closure under BRAC reflects the requirements associated with real property transfer. The FOST will be used to identify and document parcels of land that are environmentally suitable for transfer.

7.4.1 Indemnification

Transferees of base closure property are afforded additional protection through the National Defense Authorization Act for Fiscal Year 1993, Section 330, and CERCLA § 330; Pub. L. 102-484; 42 U.S.C. § 9620(h)(3) (2001). Section 330 compensates the transferee for personal injury and/or property damage that occurred as a result of that same contamination.

7.4.2 BRAC Cleanup Plan (BCP)

A BRAC Cleanup Plan (BCP) is developed after the draft EBS is available and brings together the results of the "bottom up" review. This review by the BRAC Cleanup Team (BCT) and the BRAC Environmental Coordinator includes:

Reviewing selected technologies for application of expedited solutions;

Implementing immediate removal actions to eliminate "hot spots" while investigation continues;

Identifying transferable properties;

Identifying overlapping phases of the cleanup process;

Using improved contracting procedures;

Interfacing with the community reuse plan and schedule;

Embracing a bias for cleanup instead of studies;

Validating the technology of the proposed remedy to ensure conformity with Fast Track Cleanup objectives;

Identifying opportunities for application of presumptive remedies; and

Using innovative management, coordination, and communication techniques, e.g., partnering.

The BRAC Cleanup Plan (BCP) is a product of this review. The BCP serves as a road map for the cleanup necessary to convey the property to communities for redevelopment. The BCP is a phased plan encapsulating and prioritizing requirements, schedules, and costs of the environmental programs to be implemented by the BCT for completing environmental action in support of the cleanup, reuse, and redevelopment of the installation.

For sites with existing Federal Facility Agreements (FFAs), Interagency Agreements, and orders or decrees, the BRAC Environmental Coordinator, assigned as the DoD representative on the BCT, will propose and negotiate changes needed to expedite cleanup in consultation with the EFD/EFA.

BCPs should be made available to interested parties and community groups and become an integral part of the operations of the installation's Restoration Advisory Board (RAB). However, while project level details are

appropriate for BCT discussions/consensus, only relevant summary financial data is appropriate for release to the public. Issues affecting the execution of the environmental cleanup program should be resolved at the BCT level or, where no dispute resolution can be made, ultimately by the DASN(I&E).

7.4.3 Defense Environmental Restoration Task Force (DERTF)

The National Defense Authorization Act for Fiscal Year 1991 (Public Law 101-510) established the Defense Environmental Response Task Force (DERTF). The Military Appropriations Act for Fiscal Year 1993 (Public Law 102-380) reconstituted and reconvened the DERTF. The DERTF functions as a DoD Federal Advisory Committee and provides an annual report to Congress on its findings and recommendations. Members of the DERTF include representatives of the Secretary of Defense; Attorney General; General Services Administration; Administrator of the Environmental Protection Agency; and Chief of Engineers of the Department of the Army.

The annual report contains:

Recommendations concerning ways to expedite and improve environmental response actions at military installations that are being closed or subject to closure;

Any additional recommendations that the members of the DERTF consider appropriate; and

A summary of the progress made by the Federal and State agencies in

implementing the recommendations of the DERTF.

Issues, which should be addressed by the DERTF, should be provided to the respective DoD BRAC Environmental Coordinator.

7.4.4 BRAC Information on DENIX and the Internet

The Defense Environmental Network Information Exchange (DENIX) contains a multitude of information concerning BRAC policy, schedules and other information. Section 9.2.2 contains additional information on the DENIX system.

The California Economic Diversification and Utilization Website (<http://www.cedar.ca.gov/military/index.html>) and the EPA Federal Facility Restoration and Reuse Office Website (<http://www.epa.gov/swerffrr/>) contain information on BRAC and links to other sources of information.

The Defense Environmental Network Information Exchange (DENIX) and DoD home page on the Internet contain information on how to obtain current DERTF status reports. See: <http://denix.cecer.army.mil/denix/register.html> for instructions to use DENIX

7.5 LAND MANAGEMENT

EFD/EFA real estate/planners need to coordinate with all installation staffs to ensure that real property planning and management decisions consider IR and potential site contamination issues, including ammunition, explosives, and chemical agent contamination.

The RPM's responsibilities include ensuring that EFD/EFA planning and real estate personnel are aware of the installation's contaminated sites.

Installation Master Plans, maintained by the installation or the EFD/EFA and updated every five years, should contain the locations of IR sites, and EFD Planning Division files should contain the appropriate IR documents for use by planners. Note -- Installations that historically have had a lower priority for the IR program or which are located at great distances from the cognizant EFD/EFA require greater effort on the part of the RPM to verify the environmental condition of the property.

Planners involved in developing and locating new facilities need to know where contaminated sites are and should interact with RPMs on the nature of the contamination, the length of the IR process, and the likely effects of the contaminated site on the proposed real property use. Similarly, EFD/EFA real estate personnel involved in out leasing DON property need to be aware of contaminated sites or contaminated groundwater so that appropriate decisions can be made.

Out leases should contain restrictions, which protect DON property from contamination by the tenant. In particular, out leases should include a reference to 10 U.S.C. § 2692 that states that SECDEF may not permit the use of a DoD installation for the storage or disposal of any toxic or hazardous material that is not owned by DoD.

Land use consideration should be a part of any risk assessment developed in the cleanup process as well as for remedy

selection. CERCLA exposure assessments most often classify land into one of three categories: residential, recreational or commercial/ industrial. The Baseline Risk Assessment should address future land use that is both reasonable, from land use development patterns, and protective. CERCLA § 120(h)(3) further describes the DON's responsibilities for land transfer actions.

Land procured by the Navy would be ER, N eligible if due diligence was undertaken to determine if contamination existed and none was discovered on the property before purchase, but discovered subsequently.

If contamination was discovered before purchase, the negotiated purchase price should take the cost of clean up into account and the total funds requested for land purchase by the claimant should include that cost.

Claimant/installation funds, not ER, N funds should be used to perform initial investigations prior to land purchase or transfer.

At BRAC installations, current and projected land use plays an essential role in determining cleanup levels. The DON will ensure that remedies and cleanup levels are in compliance with policy and consistent with community reuse plans where reasonable. This is especially important at sites where ammunition, explosives, and chemical agent contamination was remediated to acceptable levels based on the projected reuse of the land.

In the absence of an approved reuse plan, remedies and cleanup standards should be based on the current land use

or the most likely land use as identified in the reuse EIS. Risks should be presented for actual current and future land uses as well as those land uses that are required to be calculated by regulatory agencies. Cleanups based on projected land use, which is different from the current land use, may sometimes be in the best interest of both the DON and the community.

Additional guidance on this subject can be found in EPA's OSWER Directive No. 9355.7-04, *Land Use in the CERCLA Remedy Selection Process*, and in the DoD Base Reuse Implementation Manual, Appendix F-79: *Additional Environmental Cleanup after Transfer of Real Property* (July 25, 1997).

7.6 OFF-STATION (THIRD PARTY) SITES WHERE THE DON IS A POTENTIAL RESPONSIBLE PARTY (PRP)

An off-station or third party site is a private, State, or municipally owned or operated site that has received DON waste and now requires cleanup under CERCLA. EPA seeks to recover CERCLA response costs for assessments and cleanups costs from the Potentially Responsible Parties (PRPs) or gets them to fund assessment and cleanup costs.

PRPs may include any of the following:

The present owner or operator of the hazardous waste facility;

The owner or operator of the hazardous waste facility at the time hazardous waste was disposed there;

Anyone who transported hazardous waste to the facility; or

Anyone who arranged for disposal at the site.

DoD has no current or past ownership interest at PRP sites but does have a responsibility for cleanup of the site under CERCLA § 104(a)(3), 42 U.S.C. § 9604(a)(3) (2001). DoD Services may fulfill their third party responsibilities by:

Being actively involved in the steering committee for a PRP-led cleanup;

Adjudicating or defending a claim for monetary contribution toward remediation of a PRP site; or

Seeking Department of Justice assistance when there is cause to contest or challenge demands for DON contribution or participation.

Under CERCLA, the DON may become a PRP to enforcement actions taken to recover costs of cleanups. While EPA cannot sue the DON to recover such costs, non-Federal PRPs can; hence, the designation as "third party."

EPA uses the following procedures to notify and work with PRPs:

The EPA Regional Office sends a "Special Notice" certified letter to the PRPs. This notification may occur before, during, or after EPA responses at a site. The EPA letter informs PRPs of their potential liability, provides a list of other known PRPs, and calls for PRPs to do any or all of the following:

- Voluntarily remove their hazardous waste from the site;

- Provide all available documentation on hazardous waste sent to the site (CERCLA requires PRPs to provide this information);

- Voluntarily attend a meeting where EPA regional personnel will describe the problem and potential liability in more detail; or

- Indicate a willingness to negotiate settlement for costs incurred by EPA to date.

The EPA region will encourage PRPs to form a steering committee to undertake studies and site cleanup directly or by using an EPA contractor. The committee will determine appropriate division of costs between the PRPs and the means of cost recovery from PRPs who do not participate in the committee; and

Where EPA chooses not to recommend committee formation or where the committee is unable to reach agreement with EPA, EPA may proceed with the cleanup using the CERCLA Trust Fund to initiate enforcement litigation against PRPs to recover Trust Fund expenditures.

Under pending policy, DON's litigation office has the lead for settling claims against the Navy for third-party sites. NAVFAC will provide support as coordinated through NAVFAC HQ. ER,N will not be used to fund remedial actions without CNO and ASN approval.

7.7 CERCLA CITIZEN SUIT PROVISIONS

CERCLA provisions allow citizen suits against any person or Federal agency to

enforce the requirements of CERCLA. 42 U.S.C. § 9659 (2001). Suits can be brought for either:

Violation of any standard, regulation, condition, requirement, or order which has become effective pursuant to CERCLA to include any provisions of CERCLA § 120, 42 U.S.C. § 9620 (2001) regarding Federal facilities; or

An alleged failure to perform any act or duty imposed by CERCLA § 120, which is not disciplinary; 42 U.S.C § 9620 (2001).

The plaintiff must provide a 60-day notice to the alleged violator before any suit can be brought. An installation should immediately notify the chain of command and the appropriate EFD/EFA if it receives a notice of intent to sue. During the 60 days following the notice of intent to sue, DON personnel should identify relevant facts and information for use in negotiation or litigation, whichever occurs first. See *OPNAVINST 5090.1B CH-2 Paragraph 1-2.9* (Sept. 9, 1999) *MCO P5090. 2A, Paragraph 10221n subparagraphs (1), (2)*, for additional guidance.

7.8 FORMERLY USED DEFENSE SITES (FUDS)

The Formerly Used Defense Site (FUDS) process parallels the IR Program process. The FUDS Program must be in compliance with CERCLA and the National Oil and Hazardous Substances Pollution Contingency Plan (NCP); however, the program structure is different. The FUDS program has three major phases: inventory, study, and removal/remediation.

The U. S. Army Corps of Engineers, serving as Executive Agent of the FUDS Program, investigates sites in the inventory phase to determine site eligibility. An eligible site is defined as a formerly controlled DoD site where DoD caused, or potentially caused, a contamination problem.

The study phase consists of a site inspection to confirm contamination.

The remediation phase of the FUDS process, as with the IR Program process, includes a Preliminary Assessment/Site Investigation, a Remedial Investigation/Feasibility Study, a Record of Decision, and a Remedial Design/Remedial Action.

7.9 GOVERNMENT OWNED/ CONTRACTOR OPERATED (GOCO) FACILITIES

Government Owned/Contractor Operated (GOCO) facilities require special consideration and procedures to carry out IR-type activities. The Navy's liability and responsibility for cleanup at GOCO facilities is based upon its status as the "owner" of the facility. Past and present contractors share this liability since they are "operators" or "generators" at these facilities. It is possible that a facility could become GOCO subsequent to Navy operation when contamination occurred.

Navy policy requires current GOCO contractors to pay for any and all cleanup costs associated with their operation of Navy facilities. However, depending on how the Navy structures the GOCO contract, environmental costs may be allowable expenses and, hence, recoverable by the GOCO operator.

Navy actions to fulfill its CERCLA responsibilities should be consistent with its contractual requirements with the GOCO contractor. The result of failure to coordinate GOCO responsibilities between the Navy and the contractor may include submittal of a claim by the operating contractor under a Navy contract, or loss of potential claims by the Navy against the operator. OPNAVINST 5090.1B requires that the following policy regarding GOCOs be adhered to:

NAVFAC will perform a Preliminary Assessment/Site Investigation at Navy GOCOs and will coordinate with the corresponding Claimant command prior to commencing the study. ER, N funds will be used for the Preliminary Assessment/Site Investigation;

The results of the Preliminary Assessment/Site Investigation will be provided to the Claimant command for action. If the Preliminary Assessment/Site Investigation recommends additional follow-up work, the Claimant command will immediately initiate discussions with the contractor concerning contractor responsibilities and participation in the cleanup efforts;

If the contractor declines to perform the follow-up studies, the Claimant command will request NAVFAC to conduct the work under the IR Program. ER, N funds will be used, and all costs for the follow-up study will be identified for future cost recovery actions, if appropriate;

Similar scenarios will be followed for any Remedial Design/Remedial Actions including removal actions and interim

remedial actions. The Navy will pursue cost recovery actions against the contractor where appropriate; and

All actions, i.e., studies and cleanups, performed at GOCOs will be consistent with CERCLA and the NCP. All GOCOs will also provide administrative records and community relations plans. If the DON funds studies and cleanup with ER, N funds, Restoration Advisory Boards must be convened.

All timetables associated with CERCLA § 120 apply if a GOCO is placed on the NPL, and the Navy will ensure that these timetables are met.

The EFDs/EFAs will negotiate FFAs for GOCO facilities placed on the NPL. The negotiated and signed FFA should in no way be construed as the DON's acceptance of the contractor's/operator's share of the liability for cleanup costs associated with the GOCO site.

7.10 UNEXPLODED ORDNANCE (UXO)/ ORDNANCE AND EXPLOSIVE WASTES (OEW) AND THE IR PROGRAM

Depending on the actual site, unexploded ordnance and explosives may or may not be considered a waste. A UXO, however, is a safety concern that in every situation must be dealt with during the survey and investigation of an IR site.

The IR Program is divided into four groups: Group A - Program Management and Support, Group B - Hazardous and Petroleum Waste, Group C - Ordnance and Explosive Waste, and Group D - Technology Demonstration and Validation. Projects specifically for

the cleanup of sites contaminated with hazardous substances or Ordnance and Explosive Waste (OEW) from past practices are to be included in Group B, if they present risk to human health and the environment. Funding of projects for the mitigation of human safety risks from OEW are to be included in Group C.

The Risk Assessment Code as outlined in MIL-STD-882C, System Safety Program Requirements, 19 Jan 1993, determines the Risk Management Concept used to prioritize OEW projects. For further information see ODUSD(ES) guidance of 14 April 1994. Additionally, the Navy's Ordnance Environmental Support Office, Indian Head, Maryland is available to assist RPMs when an IR, Solid Waste Management Unit (SWMU) or Area of Concern (AOC) site is discovered at an active or BRAC installation.

7.10.1 Unexploded Ordnance (UXO) Response Services

DoD policy mandates that the Department of Defense Explosive Safety Board (DDESB) must approve all work plans that involve work on property that may have UXO before work can proceed. Before doing any work with munition sites one must consult with NAVFAC/CNO N45. Also, before leasing, transferring, excessing, disposing, on-site investigating and/or remediation of any sites with potential UXO contamination, one must obtain approval of work plans from the DDESB through the NOSA as per DoD 6055.9 STD Chapter 12C.2.

Incidental UXO responses can be handled by contacting the local

Explosive Ordnance Disposal (EOD) Mobile Unit for handling/disposal.

Remediation/management of UXO sites must be accomplished to protect human health, to protect the environment, and to meet the expected reuse of the property. UXO clearance can be done during an ER, N funded investigation or remediation if it is incidental to the investigation or remediation.

The Pacific Division, Naval Facilities Engineering Command, (PACDIV) can provide UXO response services via a Navy UXO Response Contract (NURC) awarded in July 1999. For additional information on the PACDIV contract contact: Leighton Wong, Environmental Restoration Division, PACDIV: E-Mail: WongLG@efdpac.navfac.navy.mil

This contract provides comprehensive expertise and immediate response service capability to address potential UXO contamination at sites worldwide. This service includes the use of traditional and innovative technologies and approaches; site assessment characterization; surface and subsurface detection; underwater detection; UXO access, evaluation, and identification; removal technologies; treatment technologies, transporting and disposing of waste; explosive safety risk assessment, and a QA/QC Program

The Naval Ordnance Safety and Security Activity's (NOSSA), Ordnance Environmental Support Office (OESO) also provides UXO services. See OPNAV Instruction 8020.14, Table 1 for summary of the responsibilities of NOSSA and OESO.

<http://enviro.nfesc.navy.mil/nepss/oeso.htm>

The POC is Pamela G. Clements, Head, OESO (Code N5), Naval Ordnance Safety and Security Activity (NOSSA), Indian Head, Maryland. DSN: 354-4450/4534/4906.
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An additional agency providing UXO support is DDESB.

7.11 INTEGRATING NATURAL RESOURCES AND ENVIRONMENT RESTORATION ACTIVITIES

Cleanup plans have the potential to adversely affect natural, cultural, and human resources, both directly and indirectly. These potential impacts include such resources as wetlands, endangered species and other sensitive biological species and habitats, archeological and historical resources, air quality, water quality, traffic and access, coastal zone concerns, public safety, Native American concerns, Environmental Justice, and local community sensitivities.

For many of these resources, there are environmental laws and policies to consider and/or comply with, to varying extents, depending on the type of cleanup program and the type of impact. The principal laws and policies include: the Endangered Species Act, the National Historic Preservation Act, the Archeological Resources Protection Act, the Native American Graves Protection and Repatriation Act, the Clean Water Act (esp. sections 404 and 401), the Clean Air Act (conformity), the Coastal Zone Management Act, the Migratory

Bird Treaty Act, and Executive Order 12898 on Environmental Justice.

The cleanup manager should consider such resources in cleanup plans, natural and cultural resources plans, and should consult with NAVFAC environmental planners and environmental counsel dealing with the above laws, for input and advice regarding such resources of concern and any related compliance requirements.

In addition, natural resources management in the IR Program includes ensuring that environmental resources are considered during remedial investigations, remedial actions such as removals, disposals, and relocation of hazardous wastes; transfer of real property; granting of leases; or base closures.

The NCP requires that a risk assessment be conducted on the site. Therefore, Ecological Risk Assessment (ERA) is required in the remedial investigation before any remedial action can proceed. ERAs evaluate the likelihood that adverse ecological effects may occur as a result of exposure to one or more stressors.

DoD issued interim policy on 2 May 2000 about Integration of Natural Resource Injury (NRI) Responsibilities and Environmental Restoration Activities. OUSD, *Interim Policy On Intergration of Natural Resource Injury Responsibilities and Environmental Restoration Activities* (2 May 2000).

It is DoD policy that the Components identify NRI and whenever practical, redress it as a part of the site assessment,

investigation and remedy selection and implementation processes for cleanup.

7.11.1 Natural Resources Trustees

Natural Resources Trustees are responsible for the Natural and Cultural Resources Management Program within the Federal government. These Federal trustees have statutory responsibilities with regard to protection or management of natural resources, or stewardship as a manager of Federally owned land. State agencies and Indian tribes are also trustees.

CERCLA designates the President as the "trustee" for all Federally protected or managed natural resources on behalf of the public. The President, by issuing EO 12580 and following the NCP, designates heads of specified departments, including DoD, as National Resource Trustees. Natural Resource Trustee responsibilities in the ecological risk assessment process include:

- Attendance at the majority of project meetings;

- Providing support to the RPM;

- Helping to formulate scopes of work;

- Reviewing and commenting on work plans and reports;

- Involvement in the design and implementation of the remedy;

- Providing for natural resources expertise in contingency planning; and

- Carrying out any plans to restore, rehabilitate, replace, or acquire equivalent natural resources.

Natural Resource Trustees include DoD, NOAA, State Agencies, and DOI.

7.11.2 Historic and Archeological Resources Program (HARP)

The DON's HARP is based on the National Historic Preservation Act (NHPA), 16 U.S.C. § 470 (2001), and the Archeological Resources Protection Act (ARPA), 43 C.F.R. Part 7 (2000).

ARPA prohibits the excavation, removal, damaging, alteration, or defacement of archeological resources on Federal property without a permit. "Archeological resources" are identified as any material remains of past human life or activities which are at least 100 years old and which are of archeological interest 32 C.F.R. Part 229 (2000).

Although the ARPA permitting process does not apply to excavations performed by the Navy itself, the Section 106 process of the NHPA does apply. The EFD's/EFA's have been delegated the authority to issue ARPA permits and should be consulted when any remedial action may have an impact on any archeological resource.

7.12 OFF-BASE CONTAMINATION

On occasion, contamination from a DON installation may migrate off the installation. CERCLA § 104(e), permits reasonable access to properties that may not be owned by DON for the purposes of inspecting real property that may have been contaminated as a result of

substances migrating from the DON installation. 42 U.S.C. § 9604(e)(2001).

The legal right of entry for the purpose of investigating contamination of off-base sites can be handled in a variety of ways to include:

The EFD/EFA and installation can approach the landowner and seek permission to perform the required investigations. This may require payment, or the landowner may allow access for free; or

The EFD/EFA and installation (in conjunction with NAVFAC) will coordinate Department of Justice assistance to either condemn a right of entry or provide a compliance order allowing access and entry.

In either case, the EFD/EFA legal staff should be involved as soon as it is determined that a right of entry onto adjacent land is necessary to determine the extent of contamination.

Considerations for off-base access must be taken into account when entering into FFAs and agreeing to timetables for completion of work. The Commanding Officer or Commanding General of the installation will review and sign the Record of Decision and decision documents involving the cleanup of contamination on land that is not controlled by the DON but which is the DON's cleanup responsibility.

7.13 RADIOLOGICAL ISSUES IN IR AND BRAC

Radiological issues pose special challenges at IR or BRAC sites. The CERCLA process to investigate,

characterize, and remediate (if necessary) potential chemical contamination under the oversight of EPA or the appropriate State agency also applies to radioactivity, both naturally occurring and man-made.

However, assessment of radiological issues is often complex, entails overlapping regulatory authority including some exercised by the Navy itself, and may involve specialized knowledge and expertise which IR contractors lack.

A significant factor during the assessment and evaluation of sites for radiological contamination is the ubiquitous presence of naturally occurring radioactivity that varies with geophysical characteristics of the site.

7.13.1 Responsibilities and Coordination of Issues

The radioactivity present at Navy installations may be broadly characterized as Naval Nuclear Propulsion Program (NNPP) radioactive material and General Radioactive Material (G-RAM).

7.13.1.1 Naval Nuclear Propulsion Program (NNPP)

The NNPP in the Office of the Chief of Naval Operations (OPNAV N00N, which is also part of NAVSEA as Code 08, Nuclear Propulsion Directorate) is responsible for all matters pertaining to naval nuclear propulsion, including the control of radioactivity associated with the operation and servicing of naval nuclear propulsion plants. NNPP regulates this radioactivity pursuant to the Atomic Energy Act of 1954,

Executive Order 12344 and Public Law 98-525, 42 U.S.C. § 7158 (2001).

Because of this statutory authority as a regulator, the NNPP must be involved in the remedial action process (under CERCLA, RCRA, or BRAC) at Navy installations and shipyards frequented by nuclear powered warships.

7.13.1.2 General Radioactive Material (G-RAM)

G-RAM includes man-made radioactivity used for medical and general industrial purposes, as well as naturally occurring radionuclides employed for industrial purposes; in short, it includes all non-NNPP radioactivity, which may be addressed under the IR Program at Navy installations. Examples of G-RAM include gauges which had dial markings painted with luminous radium paint, commodity items such as electronic tubes and smoke detectors containing radioactive materials, and small radioactive sources used for calibration and testing of radiation detection instruments. NAVSEA (07R) is the Radiological Control Program Office, and has responsibility for removal of Low-Level Radioactive Waste (LLRW) derived from G-RAM. NAVSEA 07R has designated the Naval Sea Systems Command Detachment Radiological Affairs Support Office (NAVSEADET RASO) as the technical support center for non-medical G-RAM technical issues; BUMED has responsibility for medical sources of radioactivity.

7.13.1.3 NAVFAC/ NNPP/ NAVSEADET RASO Interface

In administering the IR Program, EFDs/EFAs are responsible for

coordination of any radiological issue, which may arise during an installation's IR Program. Such issues may arise from regulator or public/ Restoration Advisory Board (RAB) questions, sampling or work plans, community relations plans (See Chapter 10), Federal Facility Agreements, or any other IR Program documentation.

At installations frequented by nuclear powered warships, EFDs/EFAs should inform the NNPP and NAVSEA 07R of any agreements or plans being developed to investigate or clean up NNPP or G-RAM radioactivity, respectively. In addition, the NNPP has an interest in G-RAM issues to ensure the consistency of effort at sites under NNPP jurisdiction. For any G-RAM radiological issue at other installations, only NAVSEA 07R/NAVSEADET RASO need be kept informed.

7.13.2 Historical Radiological Assessments

Naval nuclear-capable shipyards are preparing Historical Radiological Assessments (HRAs) for themselves and for naval installations frequented by nuclear powered warships, to document historical radiological policies and practices, and to compile existing radiological environmental data. HRAs use the format of CERCLA Preliminary Assessments, and their goal is to determine whether further investigation or remediation is required. Specific information contained and evaluated in the HRA comes from:

Environmental monitoring and sampling programs;

Low-Level Radioactive Waste management practices;

Low-Level Radioactive Waste Shipment and Disposal Records; and

Navy radioactive material permits/ Nuclear Regulatory Commission licenses.

HRAs are two-volume documents: Volume I addresses NNPP radioactivity, while Volume II covers G-RAM. When the Navy prepares Preliminary Assessments under CERCLA for EPA's scoring the installation for possible listing on the National Priorities List (NPL), the HRA supports this effort.

At sites listed on the NPL, the HRA will be used to satisfy FFA provisions, as required. Therefore, NAVFAC EFDs/EFAs need to ensure that NAVSEA 07/NAVSEADET RASO and the NNPP are represented on the Navy's FFA negotiating teams at installations where it is warranted. At closing installations, the HRA will be used to support other base closure documentation. Funding for HRA is either from the Environmental Restoration, Navy through NAVFAC, or directly from the Base Closure Account for installations facing realignment or closure.

7.13.3 Radiological Programs for BRAC

At installations facing realignment and closure where NNPP work has been conducted, the date of operational closure is normally established as the date of nuclear closure, as determined by the Director of NNPP.

To support closure, the following documents, which the EFD/EFAs or contractors who work for them prepare, are likely to contain radiological information that must be reviewed by the appropriate organization (NNPP and/or NAVSEA 07R) prior to release to either regulators or the public:

Installation Reuse and Disposal Environmental Impact Statement;

Environmental Baseline Survey;

BRAC Cleanup Plan;

Transfer of Claimancy Agreement (from current claimant to NAVFAC); and

Leases or other documents to transfer facilities to the community.

NAVFAC EFDs/EFAs must allow adequate time for such document review, and should incorporate such reviews into the schedules for document completion.

7.13.4 Radioactive Waste Disposal

The NNPP is responsible for proper disposal of waste generated under its cognizance, so any issue pertaining to such waste should be referred to them. The remainder of this section applies to G-RAM only.

The Deputy Chief of Naval Operations (Logistics) is designated as the resource sponsor for the LLRW Disposal Program, which includes radioactive residue from decontamination products and property contaminated with radioactivity, to the extent that decontamination is not economically feasible. The Deputy Chief of Naval

Operations (Logistics) provides guidance and resources to the program managers for execution of the LLRW Disposal Program.

In 1992, the Assistant Secretary of Defense appointed the Department of the Army as the DoD Executive Agent for the management of the disposal of LLRW. NAVSEA 07R is the Navy's program manager for oversight of the LLRW Disposal Program. Installation Commanding Officer's/Commanding General's are responsible to dispose of non-NNPP LLRW only through this program, and only with authorization of NAVSEADET RASO. In addition, they must comply with instructions and guidance issued by NAVSEA 07R and NAVSEADET RASO for every non-NNPP LLRW disposal action. CNO designated NAVSEADET RASO as the single Navy agent for disposal of non-NNPP LLRW materials.

7.13.5 Mixed Waste

Mixed waste is radioactive waste mixed with hazardous waste and is regulated under both RCRA and the Atomic Energy Act. The Director, NNPP, handles all policy and other matters pertaining to such radioactive mixed waste if the waste resulted from naval nuclear propulsion work. The Deputy Chief of Naval Operations (Logistics) (N4), is responsible for all other Navy mixed waste. Navy facilities that generate and store mixed waste associated with NNPP work are included in the Federal Facilities Compliance Act process.

Under the Federal Facilities Compliance Act, the U. S. Department of Energy (DOE) is required to prepare Site

Treatment Plans to address treatment of mixed waste for each site under DOE cognizance that generates and stores mixed waste. The Site Treatment Plan identifies treatment options for each mixed waste stream present.

42 U.S.C. § 9620 (2001)

7.14 CONTRACTING ISSUES

The following information summarizes basic concepts in procurement as they apply to the IR Program. In general, the DON contracting effort with regard to the IR Program is two-pronged, with the "Comprehensive Long-Term Environmental Action, Navy" (CLEAN) contracts providing professional services during study/design phase of the IR Program and the Remedial Action Contract (RAC) providing the actual remediation and long-term maintenance. SECNAV approved the original Acquisition Plan and strategy for the CLEAN and RAC contracting vehicles in 1988.

Innovative contracting mechanisms that may prove effective for removing above and below ground storage tanks include the Environmental Job Order Contract (EJOC) and the "Tank Yank" contracts. These contracts are both Indefinite Quantity contracts with Fixed Price contract line items. Fixed price contracts remain an important part of the DON environmental acquisition strategy when the scope of a project can be exactly defined and adequate cost history can be obtained to establish a reasonable unit price. Further guidance on contracting issues can be found in the Office of the Deputy Under Secretary of Defense (Environmental Security) publication entitled: *Management Guidance for the*

Defense Environmental Restoration Program, March 1998. See:
<http://www.denix.osd.mil/denix/Public/ES-Programs/Cleanup/DERP/guide.htm>
for details of DERP.

7.14.1 Comprehensive Long-Term Environmental Action, Navy (CLEAN or CLN)

CLEAN contracts for professional environmental studies and designs are one-year Cost-Plus-Award-Fee (CPAF) contracts with nine one-year options. The EFDs/EFAs award the CLEAN contracts on a regional basis.

CLEAN contracts also provide professional expertise during the post-award construction phase of the remediation.

7.14.2 Remedial Action Contract (RAC)

Remedial Action Contracts (RACs) accomplish IR remediation projects. RACs, like the CLN contracts, are cost plus award fee contracts. The typical RAC is a one-year contract with four one-year option periods.